

**ABSTRACT OF THE DISCLOSURE**

Current density to copy substrates of varying widths if monitored and controlled in the electrostatic transfer unit of an electrostatic reproduction device. Current density through a copy substrate is appropriately adjusted to compensate for the presence of end leakage current effect to a receptor. Voltage supplied to a current generation unit in an electrostatic transfer unit is controlled independent of the characteristic properties of the copy substrate. Image reproduction quality is maintained in an electrostatic reproduction device even as the width of the copy substrate changes and in the presence of end leakage current effect.